STATUS OF THE CLAIMS

Claims 1-42 were originally filed in this patent application. In response to the first office action dated 05/16/2007, an amendment was filed on 08/16/2007 that cancelled claims 26-27, 33-34, and 41-42 and amended claims 6, 9, 12, 25, 32, and 40. In the pending non-final office action dated 11/02/2007, claims 25, 32 and 40 were rejected under 35 U.S.C. §101. Claims 1-25, 28-32 and 35-40 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent Application Publication US 2004/0205755 to Lescouet *et al.* (hereinafter "Lescouet"). No claim was allowed. In this amendment, claims 2, 14 and 28 have been cancelled, and claims 1, 13 and 25 have been amended. Claims 1, 3-13, 15-25, 29-32 and 35-40 are currently pending.

REMARKS

Rejection of claims 25, 32 and 40 under 35 U.S.C. §101

The examiner rejected claims 25, 32 and 40 as being allegedly directed to non-statutory subject matter. The examiner states:

> In view of Applicant's disclosure, specification (see page 9, paragraph 1), the medium is not limited to physical articles or objects embodiments, instead being defined as including both physical articles or object embodiments (e.g., CDs) and non physical embodiments (e.g., data signals, transmission type media and communication link).

The examiner goes on to state applicant needs to amend the specification to be limited to physical articles.

Applicant respectfully asserts the examiner is misreading applicant's specification. Page 9 paragraph 1 of applicant's specification states:

> At this point, it is important to note that while the present invention has been and will continue to be described in the context of a fully functional computer system, those skilled in the art will appreciate that the present invention is capable of being distributed as a program product in a variety of forms, and that the present invention applies equally regardless of the particular type of computer readable signal bearing media used to actually carry out the distribution. Examples of suitable signal bearing media include: recordable type media such as floppy disks and CD RW (*e.g.*, 195 of FIG. 1), and transmission type media such as digital and analog communications links.

The paragraph above thus discloses a term "signal bearing media" which is a genus, with two specific species, namely: 1) recordable type media; and 2) transmission type media. Claims 25, 32 and 40 were amended previously to limit these claims to recordable media, the species in the paragraph above that is clearly statutory. Recordable media does not encompass transmission media. No amendment to the specification is needed because recordable media is by the express terms of the specification separate and distinct from transmission media. For these reasons, the examiner's rejection of claims 25, 32 and 40 under 35 U.S.C. §101 is in error, and applicants respectfully request reconsideration of the examiner's rejection of these claims under 35 U.S.C. §101.

Rejection of claims 1-25, 28-32 and 35-40 under 35 U.S.C. §102(e)

The examiner rejected claims 1-25, 28-32 and 35-40 under 35 U.S.C. §102(e) as being anticipated by Lescouet. Claims 2, 14 and 28 have been cancelled herein, and therefore need not be addressed. The remaining claims are addressed below.

Claim 1

Claim 1 recites:

> . . . a pause/resume mechanism residing in the memory and executed by the at least one processor, the pause/resume mechanism sending a pause message when a first operating system needs to be restarted to at least one other operating system that is using a shared resource that is also used by the first operating system, the pause/resume mechanism sending a resume message to the at least one other operating system after the first operating system is restarted.

In rejecting claim 1, the examiner states Lescouet teaches the pause/resume mechanism in claim 1, citing the abstract and paragraphs 49 and 54-59 of Lescouet. The Abstract of Lescouet does not teach any features of the pause/resume mechanism in claim 1. Paragraph 49 and 54-59 relate to virtualized devices, and the operation of concurrent operating systems. Nowhere does the cited language in Lescouet teach or suggest the specific limitations in claim 1. The examiner has not provided a detailed mapping of Lescouet on the limitations in claim 1, so applicants are left to guess at how the examiner is interpreting Lescouet. Which operating system in Lescouet, the critical operating system or the secondary operating system, reads on the first operating system in claim 1 that needs to be restarted? Which of the operating systems in Lescouet reads on the "at least one other operating system" in claim 1 that is using a shared resource, that receives the pause message when the first operating system needs to be restarted, and receives a resume message after the first operating system is restarted? Applicants respectfully

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assert the examiner's vague rejection does not establish a prima facie case of anticipation for claim 1 under 35 U.S.C. §102(e).

Claim 1 has been amended herein to recite the limitations from former claim 2, which has been cancelled herein. In rejecting claim 2, the examiner cites to paragraph 63 of Lescouet as allegedly teaching these limitations. Paragraph 63 discusses "idle" trap calls, and replacing "halt" instructions with "idle" trap calls. These calls do not "indicate each other operating system has completed pending accesses to the shared resource before restarting the first operating system," as recited in claim 1 as amended.

For the sake of argument, we assume the critical operating system in Lescouet reads on the first operating system in claim 1, and the secondary operating system in Lescouet reads on the at least one other operating system in claim 1. With this mapping, Lescouet only anticipates claim 1 if Lescouet include a mechanism that 1) sends a pause message to the secondary operating system when the critical operating system needs to be restarted, 2) receives a pause complete message from the secondary operating system to indicate the secondary operating system has completed pending accesses to the shared resource before restarting the critical operating system, and 3) sends a resume message to the secondary operating system after the critical operating system is restarted. In Lescouet, there is no teaching of restarting the critical operating system without restarting the secondary operating system. For this reason, this first mapping of Lescouet on the limitations in claim 1 results in claim 1 being clearly allowable over Lescouet.

Now we assume for the sake of argument the secondary operating system in Lescouet reads on the first operating system in claim 1, and the critical operating system in Lescouet reads on the at least one other operating system in claim 1. With this mapping, Lescouet only anticipates claim 1 if Lescouet include a mechanism that 1) sends a pause message to the critical operating system when the secondary operating system needs to be restarted, 2) receives a pause complete message from the critical operating system to indicate the critical operating system has completed pending accesses to the

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shared resource before restarting the secondary operating system, and 3) sends a resume message to the critical operating system after the secondary operating system is restarted. The language in Lescouet cited by the examiner does not teach ANY of these messages. However, Lescouet does teach a "Hot" reboot of the secondary operating system in paragraphs 122 to 129. Nowhere does the hot reboot in Lescouet teach or suggest a mechanism that receives a pause complete message from the critical operating system to indicate the critical operating system has completed pending accesses to the shared resource before restarting the second operating system. Because there is no such teaching in Lescouet, claim 1 as amended is clearly allowable over Lescouet. Applicants respectfully request reconsideration of the examiner's rejection of claim 1 under 35 U.S.C. §102(e).

Claim 3

In rejecting claim 3, the examiner cites to paragraphs 63 and 68-69 of Lescouet as allegedly teaching these limitations. These paragraphs of Lescouet have no teaching whatsoever regarding disconnecting operating systems before restarting an operating system. For this reason, claim 3 is allowable over Lescouet. In addition, claim 3 depends on claim 1, which is allowable for the reasons given above. As a result, claim 3 is also allowable as depending on an allowable independent claim. Applicants respectfully request reconsideration of the examiner's rejection of claim 3 under 35 U.S.C. §102(e).

Claim 4

In rejecting claim 4, the examiner cites to paragraphs 65-68 of Lescouet as allegedly teaching these limitations. These paragraphs of Lescouet have no teaching whatsoever regarding reconnecting operating system after the first operating system is restarted. For this reason, claim 4 is allowable over Lescouet. In addition, claim 4 depends on claim 1, which is allowable for the reasons given above. As a result, claim 4 is also allowable as depending on an allowable independent claim. Applicants

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respectfully request reconsideration of the examiner's rejection of claim 4 under 35 U.S.C. §102(e).

Claim 5

In rejecting claim 5, the examiner cites to paragraphs 56-57 of Lescouet as allegedly teaching these limitations. These paragraphs of Lescouet have no teaching whatsoever regarding a resume message that indicates that one operating system is ready to resume sharing the shared resource with at least one other operating system. For this reason, claim 4 is allowable over Lescouet. In addition, claim 5 depends on claim 1, which is allowable for the reasons given above. As a result, claim 5 is also allowable as depending on an allowable independent claim. Applicants respectfully request reconsideration of the examiner's rejection of claim 5 under 35 U.S.C. §102(e).

Claims 6, 12-13, 18, 24-25, 32 and 40

While the examiner stated independent claims 6, 12-13, 18, 24-25, 32 and 40 were rejected under 35 U.S.C. §102(e), the examiner did not provide a rejection for ANY of these claims. Because the examiner did not apply Lescouet to any of claims 6, 12-13, 18, 24-25, 32 and 40, the examiner has failed to establish a prima facie case of anticipation for claims 6, 12-13, 18, 24-25, 32 and 40 under 35 U.S.C. §102(e).

Claims 13 and 25 include limitations similar to claim 1 above, and are therefore allowable for the same reasons given above for claim 1.

Claims 6, 18 and 32 include limitations not found in claim 1, namely the first operating system owns a shared resource and a second operating system uses the shared resource. In Lescouet, the critical operating system owns a shared resource, and the secondary operating system uses the shared resource. Thus, the critical operating system in Lescouet reads on the first operating system in claim 6, and the secondary operating

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system in Lescouet reads on the second operating system in claim 6. With this mapping, Lescouet only anticipates claim 6 if Lescouet include a mechanism that 1) sends a pause message to the secondary operating system when the critical operating system needs to be restarted, 2) receives a pause complete message from the secondary operating system to indicate the secondary operating system has completed pending accesses to the shared resource before restarting the critical operating system, and 3) sends a resume message to the secondary operating system after the critical operating system is restarted. In Lescouet, there is no teaching of restarting the critical operating system without restarting the secondary operating system. For this reason, claims 6, 18 and 32 are clearly allowable over Lescouet.

Claims 12, 24 and 40 include many limitations not addressed in any of the other claims. In particular, claims 12, 24 and 40 include a pause message, a pause complete message, a disconnect message, a connect message, and a resume message. Lescouet does not teach all of these messages with their respective limitations as recited in claims 12, 24 and 40. As a result, claims 12, 24 and 40 are allowable over Lescouet.

Claims 7-11, 14-17, 19-23, 28-31 and 35-39

The examiner rejected claims 7-11, 14-17, 19-23, 28-31 and 35-39 for the same reasons as for the rejections of claims 1-5. Claims 14 and 28 have been cancelled herein, and therefore need not be addressed. Each of the remaining claims in this group all depend on independent claims that were not addressed by the examiner in the rejection. As a result, the examiner has failed to establish a prima facie case of anticipation for any of claims 7-11, 15-17, 19-23, 29-31 and 35-39 under 35 U.S.C. §102(e).

Claims 15 and 29 include limitations similar to claim 3 addressed above, and are therefore allowable for the same reasons. Claims 16 and 30 include limitations similar to claim 4 addressed above, and are therefore allowable for the same reasons. Claims 17

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and 31 include limitations similar to claim 5 addressed above, and are therefore allowable for the same reasons.

Claims 7-11, 19-23 and 35-39 each include limitations in their respective independent claims that were not addressed by the examiner in the rejections of claims 1-5, as discussed above with reference to claim 6.

For the many reasons given above, applicants respectfully assert claims 7-11, 15-17, 19-23, 29-31 and 35-39 are allowable over Lescouet, and respectfully request reconsideration of the examiner's rejection of these claims under 35 U.S.C. §102(e).

Next action should be non-final

Because the examiner did not apply the cited art to eight of the nine independent claims, namely claims 6, 12-13, 18, 24-25, 32 and 40, the next action should be non-final.

Invitation to the Examiner

Should the examiner decide to maintain any of the pending rejections of the claims, applicants invite the examiner to provide a detailed mapping of the cited art on each and every limitation in the claims. In particular, please identify which items in the cited art allegedly read on each of the following limitations: first operating system; second operating system; at least one other operating system; pause message; pause complete message; disconnect message; connect message; and resume message. By providing a detailed mapping of the cited art on all of the limitations in the claims, the examiner's rejections can be adequately addressed on appeal.

Conclusion

In summary, Lescouet does not teach, support, or suggest the unique combination of features in applicants' claims presently on file. Therefore, applicants respectfully assert that all of applicants' claims are allowable. Such allowance at an early date is respectfully requested. The Examiner is invited to telephone the undersigned if this would in any way advance the prosecution of this case.

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